

Notice of Allowability

Application No.

10/719,827

Applicant(s)

KANG, SUNG SOON

Examiner

Terressa M. Boykin

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-21-03.
2. ☒ The allowed claim(s) is/are 1-5.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☒ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

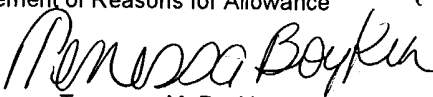
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 2-2-04
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


Terressa M. Boykin
Primary Examiner
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Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in 10719827 on 11-21-03. It is noted, however, that applicant has not filed a certified copy of the Korean application as required by 35 U.S.C. 119(b).

Allowable Subject Matter

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

Applicant(s) claimed invention is directed to a noctilucent or fluorescent polyurethane chip prepared by separating scraps according to color and pulverizing the waste polyurethane scraps in a predetermined sized, mixing 2-5 kg of stearic acid, 1-10kg of a photoluminescent pigment, 1-3kg of a flame retardant, 0.1-1kg of titanium dioxide and 10-30kg of heavy calcium carbon based on 100kg of the pulverized waste polyurethane scraps, extruding the mixture and cutting the resulting polyurethane in particle diameter of 3-0mm.

The crux of the invention lies in the discovery that by using recycled waste polyurethane obtained from the specific process including the specific amounts and having the particular dimensions produces a polyurethane, enable the energy accumulated during the daytime to radiate and emit light in dark places thus providing pedestrians, drivers or bicycle rider with clear sights during times when vision may be impaired due to weather etc. while avoiding the problems commonly associated therewith such as time consuming and costly recycling or disposing. Such has neither been anticipated by nor made obvious from the prior art. The art of record demonstrates other methods and applications of using waste polyurethane chips

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produced in the art which do not, however, contain the same method or steps as claimed and thus do not contain therein the advantages as mentioned and neither avoid the problems commonly associated therewith. For example, JP 55087120 is directed to a waste material of rigid polyurethane foam is pulverized or cut to a chip like waste material having a diameter of about 20mm or less wherein the resultant material is mixed with 5-30pts.wt solution prepared by adding a solvent, e.g. an aromatic hydrocarbon, to a prepolymer for a rigid polyurethane containing 1- 48% free isocyanate obtained by reacting 100pts.wt polyol with 50~ 300pts.wt isocyanate to reduce the viscosity of the prepolymer as a binder by the spray coating, etc. The resultant mixture is then compressed in a mold, reacted and cured by injecting superheated steam of vapor pressure 0.6-7.5kg/cm² for 30sec-10min there into. Hot air at 60-150°C is then blown on the cured material for 10-30min to evaporate the absorbed water and dry the cured material. Further, KR 2003079359 is directed to a method for manufacturing floor covering using waste urethane bumper is provided to recycle resources and conserve environment by recycling the waste urethane bumper as adhering material or floor covering material. The method for manufacturing floor covering using waste urethane bumper comprises the steps of collecting the pulverized waste urethane bumper chips by shredding waste urethane bumper for automobiles into polyurethane chip having size of 1.5 mm or less; agitating the raw materials by physical mixing of 5 to 15 wt.% of the collected polyurethane chips with polyol and isocyanate at 60 C; and injecting the agitated mixture into a mold for 2 to 4 minutes, and completely hardening the polyurethane form by demolding polyurethane form after a certain period of time, wherein the mixing process is performed at a temperature of 58 to 62 C.

Any comments considered necessary by applicant must be submitted no later preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Please note that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site (www.uspto.gov), from the Office of Public Records and from commercial sources. Applicants may be referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-217-9197.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terressa Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday through Friday from 6:30am to 3:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. The general information number for listings of personnel is (571-272-1700).

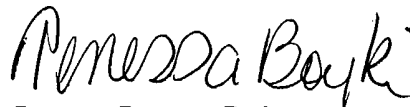
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

tmb

A handwritten signature in black ink, reading "Terressa Boykin". The signature is written in a cursive, flowing style.

Examiner Terressa Boykin
Primary Examiner
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